

## **Patent Abstracts of Japan**

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APPLICANT:

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INVENTOR:

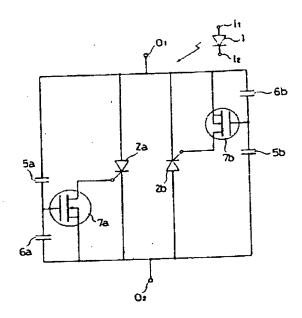
KATO FUMIO;

INT.CL.

H03K 17/78

TITLE

SOLID-STATE RELAY



ABSTRACT:

PURPOSE: To improve sensitivity and to prevent malfunction to external noise by providing a depression type MOSFET, which is connected between the gate and cathode of an optical ignition thyristor, in an erroneous ignition preventing circuit.

CONSTITUTION: The serial circuit of capacitors 5a and 6a for acquiring the control voltage of an MOSFET 7a are parallelly connected to the both ends of an optical ignition thyristor 2a and a connecting point between the capacitors 5a and 6a is connected to the gate of the optical ignition thyristor 2a. When a sharp rising voltage is impressed so that a relay output terminal  $O_1$  can be a positive potential to a relay output terminal  $O_2$ , a transient current flows from an anode to a cathode in the internal part of the optical ignition thyristor 2a. Since the potential of the connecting point between the capacitors 5a and 6a rises up, an impedance between the drain and source of the MOSFET 7a is lowered and since the transient current flows through the MOSFET 7a, the erroneous ignition of the optical ignition thyristor 2a is prevented.

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